



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-1177; Project Identifier AD-2021-00570-T; Amendment 39-22096; AD 2022-13-10]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain The Boeing Company Model 767-200, -300, -300F, and -400ER series airplanes. This AD was prompted by reports of burned Boeing Material Specification (BMS) 8-39 urethane foam, which is a material with fire-retardant properties that deteriorate with age. This AD requires replacing certain BMS 8-39 foam pads with Nomex felt in certain areas, removing certain BMS 8-39 foam pads in a certain area (which includes a general visual inspection to find BMS 8-39 foam pads), and inspecting the corner seals to determine if the corner seals were replaced, and replacing affected corner seals. This AD also prohibits the installation of BMS 8-39 urethane foam seal in certain locations. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet www.myboeingfleet.com. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at www.regulations.gov by searching for and locating Docket No. FAA-2021-1177.

Examining the AD Docket

You may examine the AD docket at www.regulations.gov by searching for and locating Docket No. FAA-2021-1177; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Julie Linn, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3584; email: julie.linn@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 767-200, -300, -300F, and -400ER series airplanes. The NPRM published in the *Federal Register* on January 31, 2022 (87 FR 4828). The NPRM was prompted by reports of burned BMS

8-39 urethane foam, which is a material with fire-retardant properties that deteriorate with age. In the NPRM, the FAA proposed to require replacing certain BMS 8-39 foam pads with Nomex felt in certain areas, removing certain BMS 8-39 foam pads in a certain area (which includes a general visual inspection to find BMS 8-39 foam pads), and inspecting the corner seals to determine if the corner seals were replaced, and replacing affected corner seals. The FAA is issuing this AD to address degraded BMS 8-39 urethane foam used in seals, which may fail to maintain sufficient halon concentrations in the cargo compartments to extinguish or contain fire or smoke, and may result in penetration of smoke or fire into the flight compartment, leading to possible loss of control of the airplane.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from Air Line Pilots Association, International (ALPA) and United Airlines, who supported the NPRM without change.

The FAA received additional comments from Aviation Partners Boeing (APB) and another individual. The following presents the comments received on the NPRM and the FAA's response to the comments.

Effect of Winglets on Accomplishment of the Proposed Actions

APB stated that the installation of winglets per Supplemental Type Certificate (STC) ST01920SE does not affect compliance with the mandated actions in the proposed rule.

The FAA agrees with the commenter. Therefore, the installation of STC ST01920SE does not affect the ability to accomplish the actions required by this AD. The FAA has not changed this AD in this regard.

Request for Clarification of the Safe Life-Limit of BMS 8-39 Urethane Foam

An individual commenter requested information related to how long it takes for BMS 8-39 foam pads to become flammable, and, if the foam is relatively new and retains its fire retardant properties, the commenter wondered if the BMS 8-39 foam should still be replaced. Conversely, the commenter questioned whether the situation was serious enough to ground airplanes.

The FAA agrees to clarify. According to Boeing, the self-extinguishing and physical properties of the BMS 8-39 urethane foam can degrade after five to ten years, and this degraded material can be an unacceptable fuel source for a fire if exposed to an ignition source. In developing an appropriate compliance time, the FAA considered the safety implications, parts availability, and normal maintenance schedules for timely accomplishment of replacement of the BMS 8-39 urethane foam. Further, the FAA arrived at the proposed compliance time with operator and manufacturer concurrence. In consideration of all of these factors, the FAA determined that the compliance time, as proposed, represents an appropriate interval in which the BMS 8-39 urethane foam can be replaced in a timely manner within the fleet, while still maintaining an adequate level of safety. No airplanes would need to be grounded to address this unsafe condition. The FAA has not changed the AD in this regard.

Request for Clarification of Cost

An individual commenter requested clarification regarding who bears the cost for the BMS 8-39 foam replacement: airplane operators or the manufacturer.

The FAA agrees to clarify. In Boeing Special Attention Service Bulletin 767-25-0381, Revision 4, dated April 26, 2021, the manufacturer indicated that no warranty remedies exist for the required actions. Therefore, the airplane operators are responsible for the costs, and any warranty remedies or adjustments in the cost of accomplishing this AD must be arranged between the manufacturer and the operator. The

FAA does not have any control over the costs associated with this AD. The FAA has not changed the AD in this regard.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information under 1 CFR Part 51

The FAA reviewed Boeing Special Attention Service Bulletin 767-25-0381, Revision 4, dated April 26, 2021. This service information specifies, among other actions, procedures for replacing certain BMS 8-39 foam pads with Nomex felt in the forward and aft crown area, removing certain BMS 8-39 foam pads in the crown area (which includes a general visual inspection to find BMS 8-39 foam pads) for certain airplanes, inspecting the corner seals to determine if the corner seals were replaced, and replacing affected corner seals. The required actions depend on requirements for use and location of the BMS 8-39 urethane foam in the airplane. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Costs of Compliance

The FAA estimates that this AD affects 396 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection (1 airplane)	33 work-hours X \$85 per hour = \$2,805	\$0	\$2,805	\$2,805

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement of foam pad with Nomex felt (361 airplanes)	29 work-hours X \$85 per hour = \$2,465	Negligible*	\$2,465	\$889,865
Removal (34 airplanes)	29 work-hours X \$85 per hour = \$2,465	\$0	\$2,465	\$83,810

*Parts are Nomex felt, adhesive, and tapes. There are no kits for this required action.

The FAA estimates the following costs to do any necessary replacements that would be required based on the results of the inspection. The agency has no way of determining the number of aircraft that might need this replacement:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replacement of corner seals	1 work-hour X \$85 per hour = \$85	Up to \$3,848	Up to \$3,933

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2022-13-10 The Boeing Company: Amendment 39-22096; Docket

No. FAA-2021-1177; Project Identifier AD-2021-00570-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 767-200, -300, -300F, and -400ER series airplanes, certificated in any category, identified as Group 1, Configuration 4; Group 2, 3, 12, and 13, Configuration 3; Group 14, Configuration 1 and 3; Group 15, Configuration 2; and Group 17, Configuration 3 and 4; in Boeing Special Attention Service Bulletin 767-25-0381, Revision 4, dated April 26, 2021.

(d) Subject

Air Transport Association (ATA) of America Code 25, Equipment/furnishings.

(e) Unsafe Condition

This AD was prompted by reports of burned Boeing Material Specification (BMS) 8-39 urethane foam, and a report from the airplane manufacturer that airplanes were assembled with seals throughout various areas of the airplane (including flight deck and cargo compartments) made of BMS 8-39 urethane foam, a material with fire-retardant properties that deteriorate with age. The FAA is issuing this AD to address degraded BMS 8-39 urethane foam used in seals, which may fail to maintain sufficient halon concentrations in the cargo compartments to extinguish or contain fire or smoke, and may result in penetration of smoke or fire into the flight compartment, leading to possible loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Within 72 months after the effective date of this AD, do the applicable actions specified in paragraph (g)(1), (2), (3), or (4) of this AD in accordance with the

Accomplishment Instructions of Boeing Special Attention Service Bulletin 767-25-0381, Revision 4, dated April 26, 2021.

(1) For Group 1, Configuration 4, airplanes; and Group 2, 3, 12, and 13, Configuration 3, airplanes: Replace BMS 8-39 foam pads in the forward and aft crown area with Nomex felt.

(2) For Group 14, Configuration 1 and 3, airplanes; and Group 15, Configuration 2, airplanes: Remove BMS 8-39 foam pads in the crown area.

(3) For Group 17, Configuration 3, airplanes: Replace BMS 8-39 foam pads in the forward and aft crown area with Nomex felt, inspect the corner seals to determine if the corner seals were replaced and if any corner seals were not replaced, within 72 months after the effective date of this AD, replace affected corner seals.

(4) For Group 17, Configuration 4, airplanes: Inspect the corner seals to determine if the corner seals were replaced and if any corner seals were not replaced, within 72 months after the effective date of this AD, replace affected corner seals.

(h) Parts Installation Prohibition

As of the effective date of this AD, no person may install a BMS 8-39 urethane foam seal on any airplane in any location identified in Boeing Special Attention Service Bulletin 767-25-0381, Revision 4, dated April 26, 2021.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANMSeattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(j) Related Information

For more information about this AD, contact Julie Linn, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3584; email: julie.linn@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Special Attention Service Bulletin 767-25-0381, Revision 4, dated April 26, 2021.

(ii) [Reserved]

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd.,

MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet www.myboeingfleet.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on June 13, 2022.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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